REMARKS

Applicants respectfully request entry of the amendments and remarks submitted herein. Claims 1, 2, 19, 20, 27 and 28 have been amended herein. Claims 3 and 4 have been canceled without prejudice to continued prosecution, and claims 11-18, 23-26 and 32-45 have been canceled, also without prejudice to continued prosecution, as being directed toward non-elected inventions.

Claims 1, 2, 5-10 and 27-31 are currently pending, and claims 19-22 are withdrawn. Reconsideration of the pending application is respectfully requested.

Double Patenting

Claims 1-10 and 27-31 are provisionally rejected under the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1-34 and 38-40 of co-pending U.S. Application No. 10/469,273.

Applicants respectfully request that this rejection be held in abeyance until allowable subject matter is identified. As that time, provided the non-statutory obviousness-type double patenting rejection still applies, Applicants will submit an appropriate Terminal Disclaimer.

The 35 U.S.C. §112 Rejections

Claims 1-10 and 27-31 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner asserted that the specification and claims do not set forth the multitude of analogs of SEQ ID NO:14 that are encompassed by the invention. According to the Examiner, only isolated polypeptides comprising the full-length, unaltered amino acid sequence set forth in SEQ ID NO:14 but not the full breadth of the claims meets the written description provision. This rejection is respectfully traversed.

Without acquiescing to the Examiner's rejection and to expedite prosecution, Applicants have amended claims 1 and 27 to refer to a 'biologically active' analog and also to require that the peptide or analog 'decrease homotypic adhesion among CD66a family members'. The reference to a 'biologically active' analog can be found, for example, at page 19 of the

specification, and the reference to the functional activity of SEQ ID NO:14 can be found, for example, in Table I, page 39 and throughout the remainder of the specification.

In view of the amendments herein, the pending claims have adequate written description support in the specification. Therefore, Applicants respectfully request that the rejection of claims 1-10 and 27-31 under 35 U.S.C. §112, first paragraph, be withdrawn.

Claims 1-10 and 27-31 stand rejected under 35 U.S.C. §112, first paragraph, as the Examiner asserted that the specification, while be enabling for peptides of SEQ ID NO:14 and methods thereof, does not reasonably provide enablement for analogs of SEQ ID NO:14 and methods thereof. This rejection is respectfully traversed.

As indicated above, for the purpose of expediting prosecution and without acquiescing to the Examiner's rejection, Applicants have amended claims 1 and 27 to refer to a 'biologically active' analog and also to require that the peptide or analog 'decrease homotypic adhesion among CD66a family members'. Support in the specification for these amendments is described above.

The claims as amended are fully enabled, specifically in view of the Wands factors (see page 8 the current Office Action). In view of the amendments herein, Applicants respectfully request that the rejection of claims 1-10 and 27-31 under 35 U.S.C. §112, first paragraph, be withdrawn.

The 35 U.S.C. §102 Rejections

Claims 1-10 and 27-31 stand rejected under 35 U.S.C. §102(b) as being anticipated by Watt et al. (1994, *Blood*, 84:200-210). According to the Examiner, Watt et al. teaches a billiary glycoprotein (BGP) that binds to CD66 and that contains a sequence that corresponds to SEQ ID NO:14 at residues 350 - 363. This rejection is respectfully traversed.

Watt et al. does not specifically call out the fragment of BGP that Applicants' claims recite (i.e., SEQ ID NO:14). Watt et al. further does not disclose that BGP or any portion thereof could decrease homotypic adhesion among CD66a family members'.

In view of the amendments herein, Watt et al. does not disclose the claimed peptide. Therefore, Applicants respectfully request that the rejection of claims 1-10 and 27-31 under 35 U.S.C. §102(b) be withdrawn.

Claims 1-7, 27, 28, and 30 stand rejected under 35 U.S.C. §102(b) as being anticipated by Barnett et al. (1993, *Mol. Cell. Biol.*, 13:1273-1282) as evidenced by Watt et al. According to the Examiner, Barnett et al. discloses a biliary glycoprotein (BGP) that comprise an extracellular domain (IIa), which comprises an amino acid sequence which is 100% identical with the claimed SEQ ID NO:14. The Examiner asserted that, although Barnett et al. did not appreciate the ability of the BGP to modulate the function of a member of the CD66 family of a ligand thereof, Barnett et al. still discloses that BGPs mediate homotypic adhesion and refers to the first paragraph on page 1280). This rejection is respectfully traversed.

Barnett et al. does not specifically call out the sequence of any BGP, and also does not disclose the particular sequence that Applicants' claims recite (i.e., SEQ ID NO:14). Athough Barnett et al. suggests that BGPs may function as class-specific homotypic adhesion proteins, Barnett et al. does not disclose that the claimed portion of BGP (i.e., SEQ ID NO:14) could decrease homotypic adhesion among CD66a family members while other portions may, for example, decrease heterotypic adhesion, increase homotypic or heterotypic adhesion, or modify homotypic or heterotypic adhesion between CD66 family members from a group other than CD66a (see Tables I and III - VIII).

In view of the amendments herein, Barnett et al., even in view of Watt et al., does not disclose the claimed peptide. Therefore, Applicants respectfully request that the rejection of claims 1-7, 27, 28, and 30 under 35 U.S.C. §102(b) be withdrawn.

Request for Rejoinder

Applicants submit that the amendments herein result in a common technical feature with withdrawn, non-elected claims 19-22; and independent claim 19 corresponds essentially to a method of using the isolated peptide of claim 1. Therefore, Applicants request that claims 19-22 be rejoined with the elected claims under PCT Rule 13 and MPEP §821.04.

CONCLUSION

Applicants respectfully request allowance of claims 1, 2, 5-10, 19-22 and 27-31. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

/September 7, 2007/

Date:_____

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